

WHAT IS CLAIMED IS:

1. A method of increasing the oral bioavailability of glycopyrrolate to a patient receiving glycopyrrolate therapy comprising administering to the patient a therapeutically effective amount of glycopyrrolate in a pharmaceutical composition without food.
2. The method of claim 1 wherein the therapeutically effective amount of glycopyrrolate is 1 mg to 10 mg.
3. The method of claim 2 wherein the therapeutically effective amount of glycopyrrolate is 1 mg to 2 mg.
4. The method of claim 1 wherein the patient has not consumed food during the period between from at least about 30 minutes prior to the administration of glycopyrrolate to at least about 1 hour after the administration of glycopyrrolate.
5. The method of claim 1 wherein the patient has not consumed food during the period between from at least about 1 hour prior to the administration of glycopyrrolate to at least about 2 hours after the administration of glycopyrrolate.
6. The method of claim 1 wherein the pharmaceutical composition comprises a unit dosage form for oral administration.
7. The method of claim 6 wherein the unit dosage form is a tablet.
8. A method of increasing the extent of absorption of an oral dosage form of glycopyrrolate as measured by the drug concentration attained in the blood stream over time in a patient in need of a therapeutic effect thereof comprising, administering to the patient a therapeutically effective amount of glycopyrrolate in a pharmaceutical composition without food.
9. The method of claim 8 wherein the therapeutically effective amount of glycopyrrolate is about 1 mg to about 10 mg.
10. The method of claim 9 wherein the therapeutically effective amount of glycopyrrolate is about 1 mg to about 2 mg.

11. The method of claim 8 wherein the patient has not consumed food during the period between from at least about 30 minutes prior to the administration of glycopyrrolate to at least about 1 hour after the administration of glycopyrrolate.
12. The method of claim 8 wherein the patient has not consumed food during the period between from at least about 1 hour prior to the administration of glycopyrrolate to at least about 2 hours after the administration of glycopyrrolate.
13. The method of claim 8 wherein the pharmaceutical composition comprises a unit dosage form for oral administration.
14. The method of claim 13 wherein the unit dosage form is a tablet.
15. A method of increasing the oral bioavailability of glycopyrrolate to a patient receiving glycopyrrolate therapy comprising administering to the patient a pharmaceutical tablet comprising about 1 mg to about 10 mg of glycopyrrolate under fasted conditions, wherein the administration results in an increase of the maximum plasma concentration (C_{\max}) and the extent of absorption of glycopyrrolate at $t = 24$ hours ($AUC_{0-24\text{hrs}}$) as compared to the administration of glycopyrrolate under fed conditions.
16. The method of claim 15 wherein the ratio of C_{\max} following administration without food to C_{\max} following administration with food is greater than about 1.1, and wherein the ratio of $AUC_{0-24\text{hrs}}$ following administration without food to $AUC_{0-24\text{hrs}}$ following administration with food is greater than about 1.8.
17. The method of claim 16 wherein the ratio of C_{\max} following administration without food to C_{\max} following administration with food is greater than about 2.8, and wherein the ratio of $AUC_{0-24\text{hrs}}$ following administration without food to $AUC_{0-24\text{hrs}}$ following administration with food is greater than about 4.5.
18. The method of claim 16, further comprising informing the patient that the administration of the glycopyrrolate dose in a pharmaceutical composition under fasted conditions results in an increase of the maximum plasma concentration (C_{\max}) and the extent of absorption of glycopyrrolate at $t = 24$ hours ($AUC_{0-24\text{hrs}}$) as compared to the administration of glycopyrrolate under fed conditions.

19. The method of claim 18, wherein the pharmaceutical composition is provided to a patient in a container associated with prescribing information that advises the patient that the administration of the glycopyrrolate dose in a pharmaceutical composition under fasted conditions results in an increase of the maximum plasma concentration (C_{\max}) and the extent of absorption of glycopyrrolate at $t = 24$ hours ($AUC_{0-24\text{hrs}}$) as compared to the administration of glycopyrrolate under fed conditions.

20. A method for treating peptic ulcer or other gastrointestinal disorder in a patient, which comprises administering a therapeutically effective amount of glycopyrrolate to the patient without food.

21. The method of claim 20 wherein the patient has not consumed food during the period between from at least about 30 minutes prior to the administration of glycopyrrolate to at least about 1 hour after the administration of glycopyrrolate.

22. The method of claim 21 wherein the patient has not consumed food during the period between from at least about 1 hour prior to the administration of glycopyrrolate to at least about 2 hours after the administration of glycopyrrolate.

23. A method for treating peptic ulcer or other gastrointestinal disorder in a patient comprising administering glycopyrrolate to the patient, wherein the extent of absorption of glycopyrrolate at $t = 24$ hours in the patient ($AUC_{0-24\text{hrs}}$) is at least about 1.0 ng*hr/mL.

24. The method of claim 23, wherein the extent of absorption of glycopyrrolate at $t = 24$ hours in the patient ($AUC_{0-24\text{hrs}}$) is at least about 1.7 ng*hr/mL.

25. The method of claim 23, wherein the maximum plasma concentration (C_{\max}) of glycopyrrolate is at least about 2.5 ng/mL.

26. The method of claim 24, wherein the maximum plasma concentration (C_{\max}) is at least about 3.0.

27. A kit comprising a pharmaceutical composition comprising a therapeutically effective amount of glycopyrrolate and a pharmaceutically acceptable carrier, prescribing

information, and a container, wherein said prescribing information includes advice to a patient regarding the administration of glycopyrrolate without food to improve bioavailability.

28. The kit of claim 27 wherein the prescribing information instructs the patient not to consume food during the period between from at least about 30 minutes prior to the administration of glycopyrrolate to at least about 1 hour after the administration of glycopyrrolate.

29. The kit of claim 27 wherein the prescribing information instructs the patient not to consume food during the period between from at least about 1 hour prior to the administration of glycopyrrolate to at least about 2 hours after the administration of glycopyrrolate.